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United States Coast Guard

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COMDTINST 5230.57
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COMMANDANT INSTRUCTION 5230.57

Subj: CG INTRANET (CGWEB) POLICY

Ref:
(a) COMDTINST 5230.56 (series), Internet Instruction
(b) Coast Guard Paperwork Management Manual, COMDTINST M5212.12 (series)
(c) Coast Guard Public Affairs Manual, COMDTINST M5728.2B (series)
(d) Coast Guard Freedom of Information and Privacy Acts Manual, COMDTINST M5260.3 (series)
(e) Use of the Coast Guard Seal, COMDTINST 5030.12 (series)
(f) Automated Information System (AIS) Security Manual, COMDTINST M5500.13A (series)
(g) CG Correspondence Manual, COMDTINST M5216.4 (series)

1. PURPOSE. This Instruction promulgates policy on CG Intranet (CGWEB) site management, CGWEB page content, CGWEB page development and CGWEB usage.

2. ACTION. Area and district commanders, commanders of maintenance and logistics commands, commanding officers of Headquarters units, assistant commandants for directorates and special staff offices at Headquarters shall ensure compliance with the provisions of this directive.

3. DIRECTIVES AFFECTED. None.

4. BACKGROUND. Internet technology is rapidly becoming integral to conducting business throughout the world as well as in the Coast Guard. The intranet (also known as "CGWEB") uses this technology inside an organization's security perimeter to provide a "private Internet", i.e., information posted on an intranet looks and acts the same as that on an Internet site, except that the information is not

accessible to the general public. Establishment of a Coast Guard `Intranet' will improve access and provide a standard interface to key CG information. This will ultimately reduce costs and improve CG mission performance.

5. DEFINITIONS. As used in this Instruction, "Assistant Commandant" means all Assistant Commandant's in Headquarters, the Chief Counsel and the chiefs of all special staff elements. Additional definitions include:

   a. Webmaster - an individual responsible for the technical management of a program or subordinate unit web site, for maintaining currency of that web site, for submitting a registration form and for posting information to the web site.

   b. Hyperlinks - buttons or words located on the page that take the user to other places within the document or other pages (similar to bookmarks in MS Word).

   c. Server - computer that provides files or applications to a user's computer. In the case of the Internet, this is the machine that provides the files requested by the browser application (Internet Explorer) running on the user's CGSWIII.

   d. Internet - a worldwide series of inter-connected computer networks that evolved from a 1950s Department of Defense project called ARPANET.

   e. Intranet - a series of Coast Guard inter-connected networks using Internet technology inside the Coast Guard's security perimeter to provide a "private Internet", i.e., information posted on an intranet looks and acts the same as that on an Internet site, except that the information is not accessible to the general public.

6. DISCUSSION. Reference (a) provided guidance in the area of Internet content, World Wide Web (WWW) page development and WWW publication to facilitate dissemination of Coast Guard information externally. The CG Intranet (CGWEB) provides a new means for internal information dissemination. It improves non-public, internal communications to Team Coast Guard operations at a reduced cost from traditional media (savings include reduction of consumables (paper, toner, envelopes, etc.) and postal costs). The challenge is to use the CGWEB efficiently and effectively, while safeguarding sensitive information, avoiding legal and security risks and representing the Coast Guard in a professional manner. All Coast Guard employees with appropriate desktop hardware, software and network connections are authorized access to the CGWEB. The CGWEB will eventually become the primary method of access to all stored electronic information within the Coast Guard.

7. RESPONSIBILITIES.

   a. General - The Coast Guard Web is overseen by the CGWEB Configuration Control Board (C^3B) under the Coast Guard's Chief Information Officer (Commandant (G-SI)) within the Systems Directorate, Commandant (G-S) at Coast Guard Headquarters. Responsibility for

content and access to the CGWEB for posting information is delegated to and resides within (listed in order of responsibility for managing web content):

- Programs (as overseen by an Assistant Commandant at the Headquarters level)
- Areas/MLCs
- Districts/ISCs
- Units/Commands

The posted information shall conform with the policies outlined in references a-e. Organizational elements given the authority in this Instruction are encouraged to establish and maintain a presence on the CGWEB; if the decision is made to pursue the use of this medium, then the guidelines in this Instruction (enclosure 1-6) shall be followed. All incidental costs for local CGWEB support shall be borne by the organizational element levying the requirement.

b. Chief Information Officer (CIO) - The Coast Guard's Chief Information Officer has ultimate authority for all matters relating to use of the CGWEB. Assigned within the Systems Directorate, the CIO position is held by the Director of Information and Technology, Commandant (G-SI). The CIO, with input from the C^3B, is final authority for:

- Assigning access authority for posting information to the CGWEB
- Setting standards for content posted to the CGWEB
- Setting standards for style and appearance of information posted to the CGWEB
- Setting minimum levels of competence for webmasters, content managers, and content providers
- Setting minimum security controls.
- Establishing standard software for web authoring and publishing
- Resolving any disputes which may arise regarding CGWEB policy

c. CGWEB Configuration Control Board (C^3B) - The C3B, charted by the CIO, is composed of representatives from each of the Assistant Commandants, Special Headquarters Commands, Chief Counsel and Chief of Staff, as well as representatives from Public Affairs, Commandant (G-CP), CG Operations System Center (OSC), the National Pollution Funds Center (NPFC) and the CG Telecommunications and Information Systems Command (TISCOM). The C^3B recommends policies for administering and managing the Coast Guard's use of the Intranet to the CIO.

d. Assistant Commandants for programs hold primary responsibility for information posted to the CGWEB for their Areas of Responsibility (AOR). Each is responsible for designating a program-level webmaster (see enclosures 1, 2, and 7 on qualifications, roles, and responsibilities of webmasters and content providers) and for assigning subordinate control within their program to directorates and offices at the headquarters level; to area/MLC-level program elements, and to district/ISC-level program elements. They may establish specific policies for use of the CGWEB for organizational elements under their control and provide access for posting information by those subordinate elements (note: this includes setting the

rules on sensitivity of information and level of protection to be afforded). They may post information, provide links, and establish new information services within technological imitations provided they resource such expanded services. Programs have the highest level of authority for allowing posting access to subordinate elements and for posting information related to their area of responsibility. They may delegate this authority to lower-level program elements or to lower levels of the chain of command.

e. Areas/MLC Commanders are responsible for general information posted to the CGWEB within their AOR. They shall appoint webmasters, post information and provide links to senior and subordinate elements, commands, and general information. They may exercise content control over programs at their level with permission of the appropriate senior program manager. Area/MLC may not re-publish higher level information (unless it has been modified for their specific purposes); links must provide relevant information posted by higher levels in the chain of command.

f. District Commanders/ISC Commanding Officers/HQ Unit Commanding Officers are responsible for general information posted to the CGWEB within their AOR. They shall appoint webmasters, post information and provide links to senior and subordinate elements, commands, and general information. They may exercise content control over programs at their level with permission of the appropriate senior program manager. No organizational element may re-publish higher level information (unless it has been modified for their specific purposes); links must be provided to relevant information posted by higher levels in the chain of command.

g. Unit Commanders/Commanding Officers, if given authority by their chain of command, are responsible for general information posted to the CGWEB within their AOR. They shall appoint unit/command webmasters, post information and provide links to senior and subordinate elements, commands, and general information. They may exercise content control over programs at their level with permission of the appropriate senior program manager. No unit may re-publish higher level information (unless it has been modified for specific unit/command-level purposes); links must be provided to relevant information posted by higher levels in the chain of command.

h. Telecommunications and Information Systems Command (TISCOM) In addition to section 6.f, TISCOM, in coordination with designated personnel at Operations System Center (OSC), is responsible for management of the physical infrastructure and support of the CGWEB and Mission Essential Application Server(s). In this role, they are primarily responsible for security of the overall system; system users (especially designated webmasters) also have significant responsibility for the security of the CGWEB and are guided by reference (f) with respect to these issues.

i. Users All users who elect to transact Coast Guard business via the CGWEB must ensure that the policies and procedures in reference (b) are followed and ensure that some form of data archiving is in place in recognition that official records are being created. Additionally all users will be held accountable for ensuring their proper usage of the CGWEB and that

any content developed by them supports a valid Coast Guard business need. A sample Intranet Use instruction is included as enclosure 9.

8. POLICY.

a. CGWEB Site Management.

(1) CGWEB site management shall be based on a distributed network environment. Each flag officer (or civilian equivalent) and Headquarters command is authorized to establish and maintain a CGWEB site for the dissemination of CG information particular to that flag officer's/command's Area of Responsibility (AOR). Requests for additional CGWEB sites shall be submitted in writing, via the cognizant program, to Commandant (G-SI) for approval.

(2) CGWEB sites shall have formally designated CGWEBmasters and CGWEB Content Approval Officials (may be the same individuals). A CGWEBmaster is an individual responsible for the technical management and currency of a CGWEB presence and for posting content to the CGWEB site. Designated CGWEB Content Approving Officials shall review content for adherence to all applicable directives and ensure information is accurate and current. Guidance for web site management and role definitions are detailed in enclosures 1-7 of this instruction.

(3) CGWEB site-managers (personnel charged with technical upkeep of the web servers) shall develop additional policy and procedures to ensure timely and easy access to their CGWEB site by subordinate commands/content providers.

(4) CGWEB sites shall ensure adequate performance measures (enclosure 4) are incorporated into their design and operation.

(5) The homepage of CGWEB sites shall use the template outlined in enclosure 8, to provide consistent navigation between individual websites within the Coast Guard.

b. CGWEB Funding.

(1) G-S has developed a funding strategy for long-term operation of the CGWEB site within CG Headquarters. This strategy allocates the baseline costs for the CGWEB across all programs based on number of workstations in each program/directorate. Any additional costs associated with maintaining the baseline shall be borne by G-S. Additional costs for increased baseline capabilities will be charged back to those programs requiring the increased capabilities. Actual chargebacks will be established by the C3B.

(2) Each Area/MLC Commanders, District Commanders, ISC Commanding Officer and HQ Unit Commanding Officers are responsible to fund their training, intranet support costs and Configuration Management costs. Organizational elements desiring to establish CGWEB sites should include projected costs in their annual spend plan

submittals to G-CFM.

b. CGWEB Security.

(1) Each CGWEB Site shall ensure that the requirements identified in reference (f) are satisfied through the implementation of selected managerial, administrative, and technical procedures. In addition, systems must also provide the capability to detect and/or negate attempts to circumvent system protection. Security control measures will cover the following areas:

a. Management controls.

b. Acquisition, Development, and Installation Controls.

c. Operational Controls.

d. Security Awareness Training.

e. Controls over the Security of Applications.

(2) The CGWEB will contain various technical controls such as: unique user identification and authentication codes, incorrect log-on attempt notification, and passwords to protect the system.

(3) Only individuals with authenticated user IDs shall have access to the system and its resources. In addition, web masters working with system administrators, shall define and control the access of subjects (e.g., user, groups) to objects (e.g., directories, files, resources) using defined access right (e.g., read, write, execute).

(4) Access controls shall be used to prevent unauthorized access into sensitive or other systems areas.

c. CGWEB Page Content.

(1) The CGWEB shall be used to publish appropriate information as well as to conduct official CG business for internal Coast Guard customers. Content providers should be prepared to maintain their pages to meet their customer's needs.

(2) Policies and procedures which apply to hard copy also apply to publication of materials on the CGWEB.

(3) Web sites desiring to provide CG information or records via a CGWEB page shall establish procedures to ensure that the records have been carefully reviewed and comply with all applicable policies and procedures. On web pages accessible by all CG personnel, do not release:

a. Personal opinion or agenda.

b. Internal program agenda not appropriate for general distribution.

c. Inflammatory comments.

d. For Official Use Only (FOUO) information.

e. Classified information.

f. Procurement sensitive/proprietary information.

g. Copyright and trademarked material or information.

h. Information which would interfere with an official investigation or law enforcement activity, or judicial proceeding, including information which could subject LE personnel to potential harm.

i. Pre-decisional information, reader files, internal letters and memoranda unless approved by the appropriate authority.

j. Internal program agendas and Privacy Act data not appropriate for general discussion, unless posted to access-controlled pages on the CGWEB. These pages are not intended for classified material, but provide the equivalent level of protection as Windows NT does for files.

(4) Information currently disseminated to internal CG Newsgroups, bulletin boards and/or electronic mail lists, shall be converted to the web format wherever practical.

(5) Duplication of information residing in other CGWEB servers is strongly discouraged. Webmasters should provide hyperlinks to needed information rather than duplicating content. Additional policies will be provided by cognizant programs.

(6) Publish only official descriptions of CG missions and entities. Include the name of the approving official and effective date when posting official instructions on the intranet.

d. CGWEB Page Development.

(1) Commandant (G-SI) shall establish and maintain the content of the "Coast Guard Web Directory Page" and its page links. This page will provide an overall index of CG Web sites and content. All subordinate sites shall link to this page.

(2) Web sites shall be allowed artistic creativity in developing their CGWEB pages. All sites are still expected to incorporate good taste and effective design principles into their web pages.

(3) CGWEBmasters are encouraged to incorporate links to related information on other CGWEB Pages and coordinate with other sites to establish reciprocal links from their pages. In addition to these page links, CGWEB Home Pages shall link to home pages of the closest superior and subordinate unit(s) in the chain of command (e.g., a district would link to the area command and subordinate groups, a group would link to the district and subordinate stations, and so on).

(4) Links to pages outside the CG are authorized in support of valid business objectives. Links to pages outside of the CG shall include a disclaimer as follows:

"NOTICE/DISCLAIMER: Links to non-Coast Guard entities are provided for the convenience of our users and do not, in any way, constitute an endorsement of the linked pages or any commercial or private issues or products presented there."

(5) The CG Seal (with gold braided rope) shall not be used on CGWEB Pages as defined in reference (e).

(6) Commercial advertising on CGWEB Pages is strictly prohibited.

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Director of Information
and Technology

Encl: (1) Training Plan
(2) Intranet Support Costs Planning
(3) Configuration Management
(4) CGWEB Performance Measurement Guidelines
(5) CGWEB Style Guide
(6) Process Flowchart for CGWEB Publishing
(7) CGWEBmaster Job Description
(8) CGWEB Home Page Template
(9) Sample Internet/Intranet Use Instruction

Training Plan

Training can be broken down into three levels. The levels, training recommendations and estimated costs (as of June 1997) are included below.

Level	Job Description	Recommended Training	Estimated Cost
Content Provider	Authors and/or provides content for publication on the Intranet	MS Word with CGWEB Assistant and basic HTML course	$1000 per year per person
Content Approval Official	Provides oversight for content providers. Establishes content needs and guidelines for particular web areas. Manages small web areas within their area of responsibility. (typically at the Office level, District/MLC/Area Division level) Takes editorial responsibility for the content Ensures web area performance measures are clearly established and maintained.	MS Word with CGWEB Assistant, advanced HTML course, Front Page training, content management course (consisting of FOIA training, Privacy Act training, Public Affairs training, Basic Security Training).	$2000 per year per person
Web Masters	Person who manages a website; mediator between content approving officials and system administrator; ensures that applicable standards such as HTML validity and link liveness are met, optimizes the web architecture for navigability, takes responsibility for the quality and style of the site; develops and enforces the website's style; liaises with graphic artists; provides first level of user support: creates web pages for other offices that do not have adequate resources to devote to web page production.	Front Page training, advanced HTML course, IIS training, Basic Security Training, Web Graphics Design	$5000 per year per person

Note: The first two levels will probably be filled by Coast Guard personnel although the task of content provider can be outsourced under the right conditions. If content provider and/or web master responsibilities are outsourced, then these costs are not applicable as they should be included in the outsourcing fees

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Intranet Support Costs Planning

Support requirements for Intranet web-related activities (CGWEB) will vary, increasing over time as the Intranet is more fully utilized. Necessary resources and configuration management are presented to clarify issues and requirements.

(1) Required System Support Services.

Resources listed in the table below are necessary for any facility supporting Intranet activities. Depending on the size and need of the facility, personnel resource types may be consolidated or expanded. As an example, a facility that requires 24x7 service will need to add resources in both Network and System Administration. An additional CGWEBMaster may be necessary if system expansion exceeds single-person capabilities.

RESOURCE TYPE	DESCRIPTION	COST /HOUR (*contracted range*)
Network Administration	TISCOM provides Network Management (e.g.. planning) services. Additional tasks include: • Router programming/administration • Firewall programming/administration • LAN connectivity/administration • WAN connectivity • Security Services	**$55-110/hour** Dependent upon skill level and contract utilized.
System Administration	A majority of larger units will have a dedicated staff of administrative personnel. Their tasks include: • Operating system installation, upgrades, maintenance. • Application installation, upgrades, maintenance. • System tuning, performance enhancements. • Systems Security	**$40-85/hour** Dependent upon skill level and contract utilized.
Site-Manager	A CGWEB Site Manager's responsibilities include: • Management of configurations for all Web-related systems and their architecture. • Management of timely and orderly updates and system revisions. • Coordination of network and system services and personnel. • Resource projections and system expansion.	**$65-120/hour** Dependent upon skill level and contract utilized. Services may be provided by Coast Guard or government personnel.

	• Funding projections and allocations. • Web Security Management	
Web Master(s)	A Web Master's responsibilities are limited to: • Coordination, review, develop and management of a CGWEB Intranet site.	**$40-85/hour** Skill level and location.
Content Oversight	• Content oversight responsibilities include: Establishment, maintenance, and enforcement of guidelines and directives.	Government personnel, Collateral duty (depending on size & complexity of web area).
Content Provider	Content provider responsibilities include: • Author/provide content for publication. • Analyze and develop applications. • Update published documents and applications in a timely manner. • Comply with guidelines & directives	**$30-85/hour** Skill level (developer or author), Collateral duty. Can be outsourced.

Many tasks can be consolidated. A Network Administrator may also be a System Administrator. Site-Managers may also be Web Masters, and may provide as well as manage content. The cost/hour specified are based upon a review of available contracts and relative locality costs. Skill level needs will represent the largest individual cost variance. Facility size, needs, and activities are primary cost determinants. Determination of start-up costs is dependent upon many factors. The following page provides examples that can be used to anticipate costs (as of 08 April 1997).

(2) Minimum Computer System Hardware/Software Requirements.

SITE SIZE	HARDWARE (MINIMUM)	RESOURCE TYPE
SMALL		
• Minimal number of static web pages. • Minimal number of Divisions, Branches, Sections, etc. represented • Infrequent updates. • Search engines & applications need no manual intervention.	• CPU: 1 processor, Pentium 75-120 • MEMORY: 32-64 Megabytes. • HARD DRIVE: 1.2 gigabyte • CD-ROM Drive • OPERATING SYSTEM: NT 3.51 (preferably 4.0) • WEB SERVER: Internet Information Server 1.0 (preferably 3.0) • FrontPage97 or equivalent (authoring, site-management)	• Administrator (Network & System). • Site-Manager/Web Master • Content Provider(s) • Content Oversight
MEDIUM		
• Moderate number of static or dynamic web pages. • Moderate number of Divisions, Branches, Sections, etc. represented • Frequent updates and/or additions. • Applications or search engines need manual intervention (indexing, etc.).	• CPU: 1 processor, Pentium 120-200 • MEMORY: 64-128 Megabytes. • HARD DRIVE: 2.1 gigabyte • CD-ROM Drive • OPERATING SYSTEM: NT 3.51 (preferably 4.0) • WEB SERVER: Internet Information Server 1.0 (preferably 3.0) • FrontPage97 or equivalent (authoring, site-management)	• Network Administrator • System Administrator • Site-Manager/ Web Master(s) • Content Provider(s) • Content Oversight
LARGE		
• Significant number of static or dynamic web pages. • Significant number of Divisions, Branches, Sections, etc. represented • Frequent updates and/or additions. • Stand-alone (i.e. multiple computers) applications, databases, etc.	• CPU: 2 processor, Pentium 120-200 • MEMORY: 128+ Megabytes. • HARD DRIVE: 2.1 gigabyte (2 each) • CD-ROM Drive • OPERATING SYSTEM: NT 3.51 (preferably 4.0) • WEB SERVER: Internet Information Server 1.0 (preferably 3.0) • FrontPage97 or equivalent (authoring, site-management)	• Network Administrator(s) • System & Database Administrator(s) • Site-Manager • Web Master(s) • Content Provider(s) • Content Oversight(s)

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Configuration Management

Managing an Intranet requires a great respect for process, perhaps because it's the Internet/Intranet technology that will change the most rapidly over the next several years. Intranet technology is in its infancy and requires a solid development base to withstand the sea of changes it may undergo as new technology emerges and bona fide user demands increase. This makes it essential that "best practices" be created and followed with Intranet-related projects.

Essential in obtaining a configuration that can be managed are:

- **Definition of Intranet system requirements**: Determination of initial functionality and identification of functionality that may be added at a later date.
- **Identification of security requirements**: Determination of applicable security measures such as encryption or limited access of sensitive information.
- **Definition of system administration requirements**: Development of a plan for managing the Intranet system on a day-to-day basis, including permissible down-times, and methods for updating or backing up content without severe performance reductions.
- **Definition of technical support requirements**: Set up procedures for technical support and make sure all issues are handled promptly. Users should not have to wait longer than one working day for response to their questions.
- **Definition of an Intranet system architecture**: After examination of, define and design an architecture that meets current and projected needs.

Each Intranet site differs in information needs and requirements. A current "site-map" (hierarchical mapping of directories and files with respect to administrative and authoring responsibilities) is a key element in defining Intranet architecture and is essential to management of the Intranet configuration.

Additionally, a common reference platform in essential to obtaining efficiencies and good Intranet management. As Intranet technology grows and its potential is realized, the Coast Guard's information needs and requirements may change. As our needs change, the requirements listed above should be documented, and incorporated into the common reference platform specifications and in planning for and maintaining the Intranet architecture.

Intranet Budget (Costs as of June 97):

Small or Medium CGWEB Site:	Non-recurring Costs	Recurring Costs
1) CLIN 0033D. Pentium 133mhz machine, 16mb RAM, CD-ROM	$1403.00	
2) Extra 48 MB RAM, Monitor, Keyboard	~$700.00	
3) Microsoft Windows NT Server Software	$267.00	
4) 50% of a contractor's time to act as webmaster		$50,000.00
5) MS Front Page Licenses (20)	$1200	
6) IT Recapitalization		$3,570
TOTAL	$3,570	$53,570

Note: IT recapitalization costs consist of hardware/software upgrades in future years.

Large CGWEB Site:	Non-Recurring Costs	Recurring Costs
1) CLIN 000401C, Dual-Pentium 166mhz, 96MB RAM, CD-ROM	$8257.00	
2) Monitor, Keyboard	~$400.00	
3) Microsoft Windows NT Server Software	$267.00	
4) 100% of a contractor's time to act as webmaster		$100,000.00
5) MS Front Page Licenses (50)	$2800	
6) IT Recapitalization		$11,724
TOTAL	$11,724	$111,724

Note: IT recapitalization costs consist of hardware/software upgrades in future years.

The exact cost for total Coast Guard-wide implementation of the CGWEB cannot be determined at this time. However a rough approximation of the total cost is broken down as follows:

Web/Unit Size	**Number of Sites**	**Cost per Site**	**Total**
Large	10	$111,724	$ 1,117,240
Medium	17	$53,570	$ 910,690
Total	27		$ 2,027,930

CGWEB PERFORMANCE MEASUREMENT GUIDELINES

Several methods can be used to measure the value of information distribution using the CGWEB. The methods allow flexibility to meet program specific criteria. Each method measures a different aspect of web performance. Taken together, these methods provide an estimate of the effectiveness of a CGWEB site.

1. QUALITATIVE MEASURES

Each CGWEB content section shall provide a mechanism for user feedback. The Intranet/Internet is a medium that provides an easy and instant way for users to express general concerns and request additional information and services in response to web site content and technical issues. A hyperlink to an e-mail address is the minimum requirement. A systematic approach to tracking e-mail messages will enable programs to take maximum advantage of the opportunity to measure and improve their CGWEB presence and customer service as well as provide cost savings to the program and the organization. E-mail can be sorted into predetermined categories. Suggested categories include:

- Content Requests
- Content Corrections and Complaints
- Technical Problems
- One Time Requests for Information
- General Comments

Additional categories can be added to accommodate other specific measurement criteria as needed.

2. QUANTITATIVE MEASURES

Another method for measuring traffic to the web site is to evaluate the web site access statistics or "hits". These statistics give an account of total web site files transmitted monthly, daily, and also provide averages. Hit counts can indicate where traffic sources originated.

However, hit counts are a very imperfect measure. One page can count as five hits if it contains four graphics. Each page element counts as a hit. Therefore, the number of page elements must be divided into the total hit count for that page. Furthermore, hits give no indication of why the hit was made. The page could have been inadvertently accessed.

Finally, each page or section can be evaluated for access times. This method is best used to gauge broad trends over time. Time of access can provide some indication of the type of users accessing the page and what they are accessing the page for. For example, let's assume a Plan of the Day (POD) page is hit the highest at 0800 every day. One can assume that personnel are accessing the page to learn about the day's events and announcements. This data should

reinforce the need to have the current POD up prior to 0800. Additional feedback from users, when used in conjunction with this information can help a website be more responsive to its users' needs.

3. COMPARISON MEASURES

Although the CGWeb is only one of many communications mediums, it has the potential to deliver more efficiently and with less cost than traditional means. For example, documents, once posted on the web server, can be downloaded indefinitely by web site customers without requiring additional program time and/or funds for duplicating and packaging the documents for each request. A comparison approach to web site measurement will enable each web content author to contrast resource expenditures using traditional distribution methods with that of the CGWeb.

CGWEB Style Guide

These are required elements for web sites and pages that are a part of CGWEB.

I. All Pages in a Web Site Shall Include:

A. A Title Tag that is descriptive of the content of the page or site. The Title Tag should make sense to the user when used in hotlists, bookmarks, and for search engines.

B. Web site navigation devices that allow users to move within the site, including hyperlinks to the site's Home Page and major content sections.

C. An author's block that includes:

1. Web Master's name.
2. Author's name, if different from Web Master's.
3. Date of last content update.
4. A copyright notice-more information on copyright is listed in Section IV.

II. All Web Sites Shall Include:

A. A home page constructed in accordance with the templates provided on CGWEB's home page. This will provide a consistent interface between various websites within the organization while allowing for maximum flexibility and creativity in meeting business needs.

B. A feedback mechanism for users to comment on the site, offer problem reports. etc. A hyperlink to the author's e-mail address is the minimum requirement.

C. A text alternative for all graphic-based navigational devices for viewing in non-graphics mode. Can use the Graphics Tag for this.

D. A disclaimer for any CGWEB hyperlinks to external internet pages or sites. The following language should be used:

"NOTICE/DISCLAIMER: Links to non-Coast Guard entities are provided to fulfill the business needs of our users and do not, in any way, constitute an endorsement of the linked pages or any commercial or private issues or products presented there."

E. Monitoring warning: "Official government computer systems are subject to security monitoring at all times, and the use of such systems constitutes consent to Communications Security (COMSEC) monitoring. If security monitoring reveals evidence of improper use or

criminal activity, such evidence will be provided to appropriate management and/or law enforcement personnel."

III. Other Conditions:

A. USCG Logo Usage

1. The USCG Logo should be shown due respect at all times. Treatment of the logo should keep the pride and professionalism indicative of the organization it represents at the forefront.

2. Always maintain clear contrast between the logo and the background at the forefront.

3. Logo spins, fly-ins and morphs are acceptable but must be in keeping with USCG's image. In addition, the final frame of any special effect must be an acceptable logo.

4. Do not change the aspect ratio of the logo.

5. When in doubt regarding logo usage, it is best to err on the conservative side. G-SI is available to answer questions, provide consultation and refer you to the proper office for additional assistance. Approved computer-generated logos in GIF and JPG files are available from the CGWEB Tools page on the CGWEB home page.

B. Other Problematic Graphic Elements- Do not use the following on your web site:

1. Copyrighted material, such as "Dilbert" cartoons, photos, trademarks (other corporations' logos), etc.

2. Money, paper or coins.

3. Stamps.

IV. Copyright

A. In designing content and graphics for CGWEB Web sites, avoid copyright infringement. All work should be original work except for material which is clearly identified as public domain.

B. Web copyright references:
http://www.benedict.com/
http://www.strom.com/pubwork/intranet.html

Note: These websites are being provided for informational purposes only for the convenience of USCG personnel and does not, in any way, constitute an endorsement of the linked pages or any commercial or private issues or products presented there.

C. G-SI is available to answer general policy questions. If you have a question regarding a specific portion of your website and whether it violates an existing copyright or trademark, consult your servicing legal office.

CGWEB GUIDELINES

The following guidelines are presented to assist authors in the design and development of web pages and sites. Although not mandatory, they do represent "best practices" within the industry. A principal advantage of the graphical Web format over other network architectures is it's ability to enhance the user-machine interface, thus improving user productivity. Poor site management can totally defeat this potential plus. This concept of content organization: page layout, navigation, and site testing and review, among the other topics in this section, warrant the greatest attention to detail.

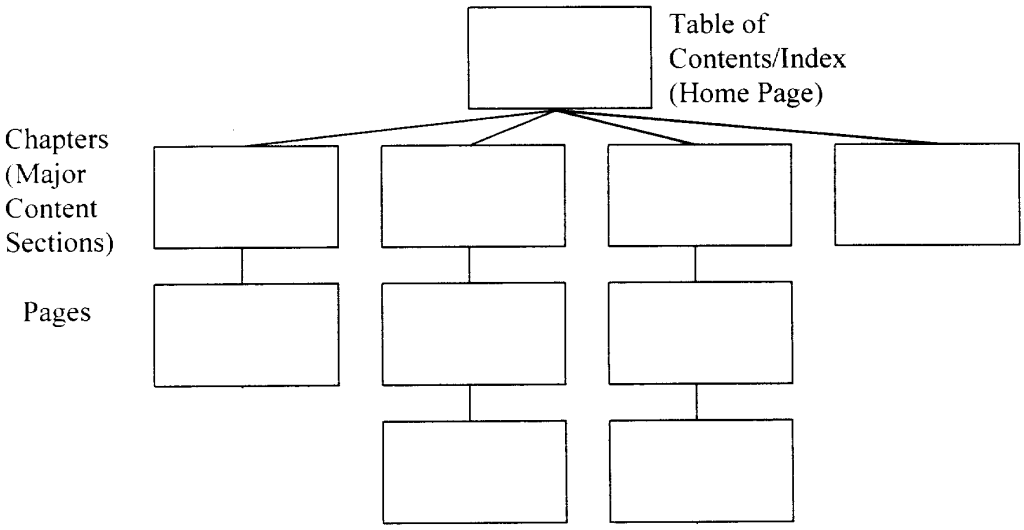
A. The Site In General

1. A site and all of its pages should put across a well-defined goal and concept. The site should be designed so that users are always aware of:
   - Context- a strong sense of what the page they are reading is about.
   - Navigation- how to move to related information.

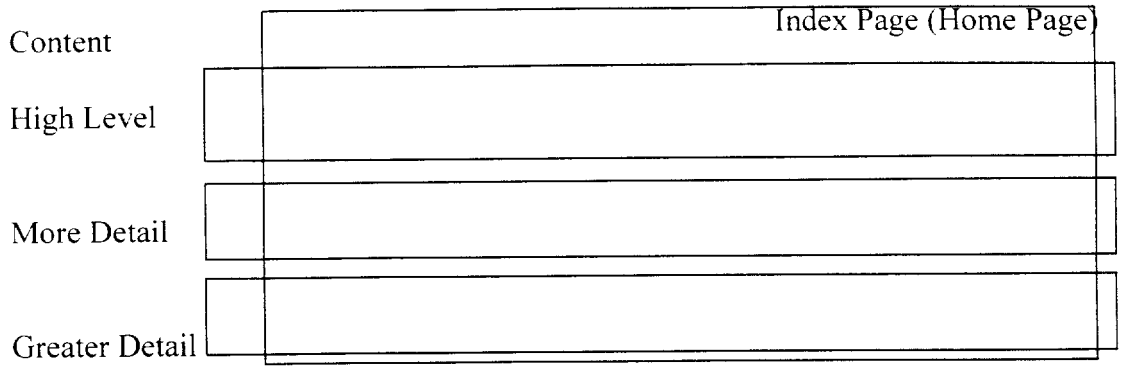
B. Content Organization

1. Keep the content/page structure of the site as simple as possible. There are different approaches/metaphors that can be used:

   a. Simple book structure- content organized like a hardbound book



b. Modified book structure- information is presented in layers of detail, with both vertical and horizontal navigation



2. Dividing large chunks of content into several interlinked files helps with user comprehension and shortens browser download time.

3. Don't put important information at the bottom of the page. The user may not access it. Lead any page with the most important information.

4. A good rule of thumb is to keep web pages to less than 3 printed pages in size, including spacing for images. This equals 5-6 screens for the average browser.

5. The author's block information can be listed on the page, or a hyperlink given and an additional page used. If listed on the page, it is usually positioned at the bottom.

6. An "About this Site" page is a good place for disclaimers, legal notices, site credits, list of backend systems, contact information, etc. Large sites typically have a lot of background information associated with them and so can benefit from such a page.

C. Filenames

Filenames shall contain no spaces. Relative Universal Resource Locators (URLs) shall be utilized wherever possible. For example:

Use:

<A HREF="NOTICES/nicout.htm">

Do not use:

<A HREF="http://wwwserver.comdt.uscg.mil/wwwroot/www/NOTICES/nicout.htm">

Using relative URLs will allow the movement of the entire "directory tree" of HTML code to another server and the code will continue to operate without modification.

D. User Feedback

1. Make it clear if you will accept criticism or suggestions and how users will get this to you.

2. The e-mail point of contact listed or hyperlinked to should be a generic department address/mailbox, rather than a specific person (e.g., webmaster@comdt.uscg.mil).

E. Page Headings

1. All pages should have only one page heading.

2. The heading of the Home Page should include a title element that describes the purpose of both the site and the page itself. The first paragraph of body text should give a brief introduction to the site and the pages that follow. Indexing programs will be able to search the site for information if as many keywords as possible are included in the first paragraph.

3. The heading for lower level pages should include a title element that describes the content of the page. The first paragraph of body text should have a concise statement of what the page is about, again including as many keywords as possible.

4. All heading titles should be able to be understood out of context.

5. All heading titles should be less than 64 characters in length due to the size of the window title bar.

F. Writing Page Text

1. Less is always better. Don't add fluff to the text. A computer screen is 25% slower to read than paper so write 30% less text.

2. Content text and vocabulary has to stand alone. Remember a user may connect to any of the pages in any order.

3. State the status of the information. If it's preliminary or incomplete tell the user.

4. Hyperlinks should be a descriptive and integral part of the text. Write the text as though it is to be printed and then make words or phrases hyperlinks. The text should be meaningful in its own right with the links adding extra functionality. Hyperlink text should also tell users what they will be getting or where they will be going if they access the link.

5. Don't repeat the same link with a different name.

6. Don't unnecessarily repeat the same hyperlink more than once per page.

7. Avoid references in the text to the online aspects of the site, e.g., Click Here. Stick to the content and avoid talking about the mechanics. Use hyperlinks, don't talk about them.

8. Use "What's New" hyperlinks to highlight the latest additions and revisions, especially for sites that go through many iterations. Place "What's New" indicators on the Home Page within the heading or first paragraph.

9. Avoid useless external hyperlinks. Make sure what you hyperlink to has a needed and specific reference to the content of the document being hyperlinked.

G. Page Lay-Out

1. Keep a reasonably consistent visual style between pages. This helps with navigation and site identity.

2. Pastel background colors are good for large amounts of text. Gray, watermarked backgrounds can be hard to read on some monitors.

3. Use horizontal rules and dividers sparingly; too many can make a page look choppy.

H. Navigation and Hyperlinks

1. Navigation links can be inserted as text, images, or a combination.

2. Less is always better. Don't add items to the user interface that are not needed.

3. Navigation hyperlinks should be consistently displayed (e.g., same buttons for Next, Previous, etc.) and should be placed consistently within each page (e.g., appears at the top, bottom, after each section, etc.)

4. Don't make something that looks like a button (navigation device) but doesn't work like a button. Iconic images should be hyperlinks or exclude them from the page.

5. Although they can be a compact form of navigation link, image maps should be used sparingly due to the problems of download time. The image(s) used should readily convey the concept of navigation to a new part of the site.

6. Using a numbering system or other reference device for the major and minor section headings helps to convey the pages' positions within the site's hierarchy and assists with user navigation.

I. Search Engines

1. If the site is very complex or has a depth of information, then a search facility should be included.

2. For assistance with search engines, contact your local CGWEBMaster.

J. Graphics

1. Include in-line images only if they really add something to the understanding of the content.

2. Vertical screen space is more restrictive than horizontal, so keep images short and fat.

3. For download images, warn the user of any big file sizes or long download times, and then give them the choice to download the image.

4. Always provide text alternatives for graphics. Assign a word or phrase to replace an image when it cannot/isn't displayed.

5. Don't use color to give important information. Some users maybe color deficient.

6. To help with image color mapping, limit the graphic(s) to 150 colors on a given page, and 50 colors in a specific image.

7. Image files (.gif or .jpg) should be 40 Kbytes or smaller (20 Kbytes if going globally), although 5 Kbytes or smaller is ideal. This is especially true for image maps used for navigation links where the user is anxious to move on to new content.

8. When the total quantity of images is large it is better to have smaller, interlinked files.

K. Printing Pages

1. If it is likely that users will want to print pages from the site, then provide a separate file for this purpose in addition to the interlinked, displayed version.

L. Site Testing and Review

1. Test the web site with a sample of the target audience. Can they easily find the information they need?

2. Test pages with the standard CGSWIII image load. Pages need to be designed and developed to be standard image load compliant. Minimize use of proprietary extensions to HTML, particularly with content that may be published on the Internet.

3. Test security controls.

4. Be careful to check all hyperlinks to avoid deadends.

5. Devise a content/page maintenance plan for the site. Frequent review and update of information is required (and expected) by users.

Process Flowchart for CGWEB Publishing

Develop a Web Site Plan

- What are your Business Goals?
- What is the Purpose of your Web Page/Site? (Do you want to inform, excite, motivate, sell?)
- Who is your audience? How do you know they're your audience?
- What information do you have that this group wants or needs?
- What audience demographics or characteristics might determine the way the message should be presented?
- What topics provide the audience with the knowledge they need?
- Who will develop the initial Web page/site? Do you have a deadline?
- Does your page require 7x24 support? If so, have you arranged support with OSC Martinsburg? If not, is support taken care of at your local Website?
- What is your plan to regularly update information?
- How will you respond to email generated by your site?
- Do you need access to any existing databases or systems?
- What are your plans for measuring your site's/page's success in addressing goals?
- What is the sensitivity of your information? What functional security controls does it require?

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Web Site Registration via CGWEB - Register your presence on the CGWEB
http://cgweb.comdt.uscg.mil/registration.htm

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Rules of the Road
Review this Instruction, Style Guide and the CGWEB page for important Rules of the Road

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Site/Page Development
Use the CGWEB toolbox to help develop your pages/sites

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Site Review & Certification by local Webmaster
Ensures site/page adheres to CGWEB standards

↓

Site Publishing
Webmaster makes your page/site available to CGWEB

↓

Statistical Analysis
Benchmark your page/site to ensure it fulfills your intended goals.

↓

Feedback
Process Improvement

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CG WEBMASTER Job Description

MANAGEMENT DUTIES:

- Person who manages and maintains a website.
- Technical mediator between content provider groups (authors) and the system administrators.
- Works with content providers (authors) to ensure the effectiveness, consistency and timeliness of the web pages.
- Develops, enforces and takes responsibility for the quality and style of the site in compliance with this instruction.
- Suggests technical strategies to create and maintain Web content and design technologies to improve effectiveness.
- Is responsible for the planning, development, deployment, management, maintenance and security of the web site.
- Possesses the ability to interface effectively with senior management and diverse user group to include oral presentations, and written reports. In addition, good negotiation skills, and excellent analytical skills are necessary. Must be able to operate within, and enhance, a team environment.
- Provides input to the C3B (working group) to help ensure that the Coast Guard is effectively utilizing web technology as a business tool.

TECHNICAL DUTIES:

- The technical focal point for the Directorate web presence.
- Ensures that applicable standards such as HTML and link validity are met.
- Optimizes the web architecture for navigability.
- First level of user support and training for usage, construction, and file transfer of web pages.
- Creates web pages.
- Is current in all technological updates, web developments, web security and computer networking.
- Must have a working knowledge of HTML and a solid knowledge of Internet standards and protocols such as HTML, HTTP, Microsoft IIS, and CGI (or other appropriate interface) design and programming.
- Must maintain in-depth usage analysis from log files.
- Monitoring & reporting performance measures to content approving official.

ARTISTIC:

- Creates an intuitive site that adequately reflects the sites business objective thus enhancing content, while not obscuring it.
- Is knowledgeable in basic graphic design principles and marketing strategies as well as standard design tools, content development and management products.
- Creates effective, intuitive templates/style sheets for site standardization and to simplify changes.
- Experienced in the preparation of artwork for the web. Including hardware/software tools associated with the creation of artwork.
- Keeps up with developments in design theory, practice and technology

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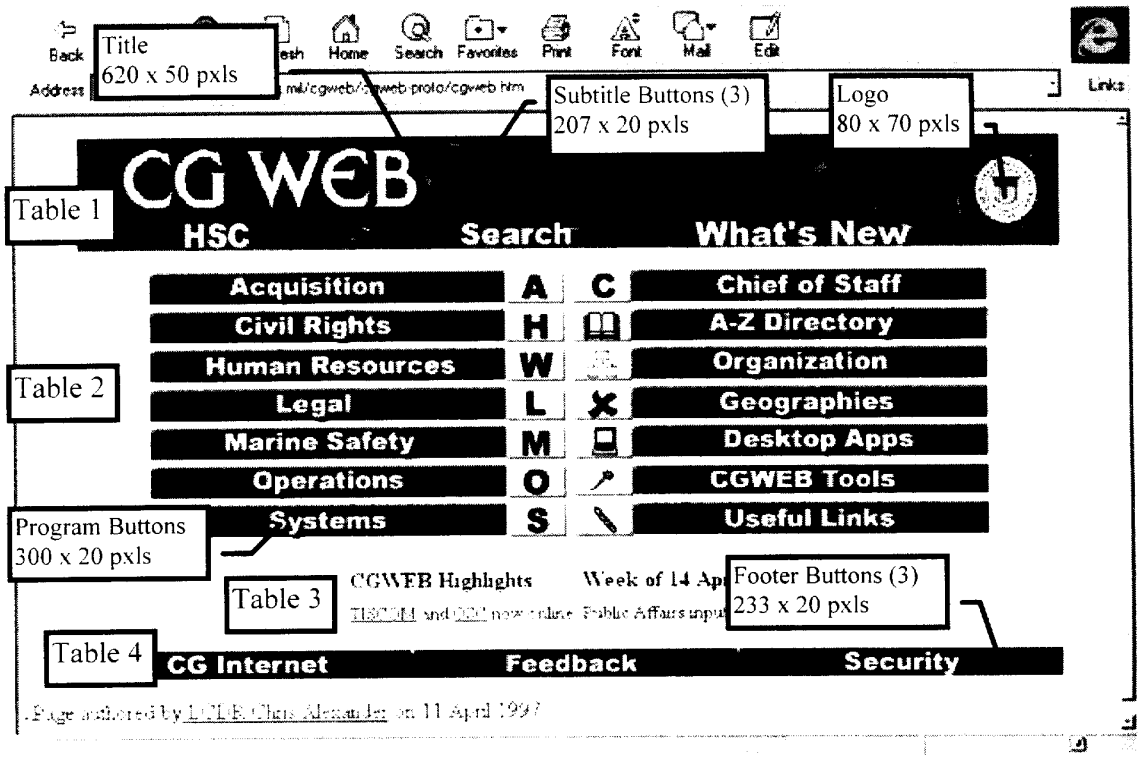
CGWEB Home Page Template



The template is arranged as a series of four tables:

Table 1 is the page header section. It consists of the Title Banner, Organization Logo, CGWEB Home Page Button and Search Button. Table is 2x3 cells with the third column combined. It has no borders, no cell padding and no cell spacing.

Table 2 is the business areas section. It consists of the Program Buttons. Note: These program buttons may not apply to all commands and may be modified to meet business needs. However, it should be noted that any change to the above structure may be disorienting to new visitors and may decrease the site's effectiveness. Also note that the page header section (Table 1), the announcement section (Table 3) and the footer section (Table 4) are mandatory and may not be altered without a waiver from the C3B. Table 2 is 7x2 cells and has 1 pixel border.

Table 3 is the announcement section. It is a two element table used to communicate news and announcements to the reader. It is 1x2 cells.

Table 4 is the footer section. It consists of a link to the CG Internet Site, a link to a feedback area for the local web site and a link to the CG AIS Security Page. It is 1x3 cells. This table is formatted similarly to Table 1 with no borders, no cell padding and no cell spacing.

This template and its parts will also be available on the CGWEB Home Page in the CGWEB Tools section.

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SAMPLE INTRANET USE INSTRUCTION

HSCINST 5230.XX
JUN 06 1997

HEADQUARTERS SUPPORT COMMAND INSTRUCTION 5230.XX

Subj: USE OF THE INTRANET AT COAST GUARD HEADQUARTERS

Ref: (a) CG Intranet (CGWEB) Policy, COMDTINST 5230.x (series)
(b) Headquarters Information Systems Security Program, HQINST 5510.5 (series)
(c) Paperwork Management Manual, COMDTINST M5212.12 (series)

5. PURPOSE. To provide policy and guidance on the use of the Intranet at Coast Guard Headquarters.

6. ACTION. Area and district commanders, commanders of maintenance and logistics commands, commanding officers of Headquarters units, assistant commandants for directorates and special staff offices at Headquarters shall ensure compliance with the provisions of this directive.

7. DIRECTIVES AFFECTED. None.

8. DISCUSSION. Reference (a) provided guidance in the area of Internet content, World Wide Web (WWW) page development and WWW publication to facilitate dissemination of Coast Guard information externally. The CG Intranet (CGWEB) provides a new means for internal information dissemination. It improves non-public, internal communications to Team Coast Guard operations at a reduced cost from traditional media. The challenge is to use the CGWEB efficiently and effectively, while safeguarding sensitive information, avoiding legal and security risks and representing the Coast Guard in a professional manner.

The CGWEB provides seamless access to the Internet. Therefore, this instruction will also address Internet usage policies.

All Coast Guard employees with appropriate desktop hardware, software and network connections are authorized access to the CGWEB. The CGWEB will eventually become the primary method of access to all stored electronic information within the Coast Guard.

5. POLICY. Reference (a) limits access to the Internet using Coast Guard information systems to the conduct of official government business. The same applies to the CGWEB. As with any Coast Guard resource, it shall not be used for personal, political, moral or philosophical reasons. Official government computer systems are subject to security monitoring at all times, and the use of such systems constitutes consent to Communications Security (COMSEC) monitoring. If security monitoring reveals

evidence of improper or criminal activity, such evidence will be provided to appropriate management and/or law enforcement personnel.

6. SUPERVISORY RESPONSIBILITIES. Supervisors shall ensure that their employees comply with this instruction and that Intranet use is not being abused. They should also challenge their employees to use the CGWEB to improve business processes. As required by reference (b), CGWEB usage will be monitored with random usage reports or specific site reports provided by HSC to supervisors. Supervisors will verify that the sites users access are for legitimate government purposes.

7. USER RESPONSIBILITIES. Users shall handle and use information obtained via the CGWEB according to all applicable directives. This includes Freedom of Information Act and Privacy Act guidelines; rules for handling For Official Use Only (FOUO) data and other applicable documents.

8. WEB PAGES. Policy concerning construction and content of CGWEB pages rests with Commandant (G-SI) and is outlined in reference (a). Users desiring to host a Web page on the Headquarters CGWeb Server shall contact their respective program representative.

9. RECORDS. Business conducted using the CGWEB/Internet that constitutes an official record must comply with the policies and procedures in reference (c).

10. REPORTS. Any CGWEB/Internet access information abuses or security problems encountered while using the CGWEB/Internet shall be reported to the Headquarters LAN Automated Data Processing System Security Officer (ADPSSO), HSC (t-1a) or the Headquarters Automated Data Processing Security Officer (ADPSO), HSC (t-1c).

11. FORMS. CGHQ LAN User Information forms are available at the HSC (t) help desk located in room 1611.